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EXAMINER

TRUONG, DENNIS

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. This Office Action is in response to applicant's remarks and amendments filed 9/27/2010.

Response to Amendment

2. It is acknowledged that claims have been amended claims 1, 13 and 15 have been amended.
3. Claims 1, 3, 4, 6-13, 15-19, 21 and 22 are pending.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 3, 13, 15, 19 and 22 on page 10-11 have been fully considered but are not persuasive. Applicant argues that Ogawa in view of Travagline fails to suggest, "a person receiving notification of an alarm or event would establish contact with an internal or external party to obtain information regarding the event or alarm". Examiner respectfully submits that at paragraph [0033] Ogawa discloses "a number of monitoring screen are provided for different pieces of plant equipment 1 and can be selected from the maintenance terminal device 6" which teaches the ability to monitor plant equipment through the portable device terminal device 6. In paragraph [0043] Ogawa discloses "drawing and instruction manuals of plan equipment installed in the plant may be stored in an electron in filing system, there by allowing workers to reference them while they are patrolling the plant. Thus, the workers can perform efficient and versatile maintenance work", which teaches while patrolling the plant with the portable device the worker is able reference drawings and instructions manuals when maintenance work is necessary. Also in paragraph [0024] Ogawa disclose "enables the control panel 5 to be operated from the maintenance terminal device 6 and an online conferencing function B that enables conversation, i.e. conferencing, between the worker using the maintenance terminal device 6 and a monitoring worker in the central monitoring room 3"

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which teaches the ability to conference a monitoring worker in the central monitoring room where the monitoring worker is internal or external worker who has technical knowledge about the selected equipment and can provide information and support needed for the maintenance work. Through the above disclosure Ogawa teaches the ability to monitor plant equipment using a portable device and also using the portable device to reference instructions and manuals to assist in maintenance work. And also the worker can contact a monitoring worker which can be a internal or external worker who has technical knowledge about the selected equipment by conferencing the monitoring worker for further support in addressing equipment in the plant. Through this process of monitoring and addressing the maintenance needed on a plant equipment one of ordinary skill in the art would recognize that some type of alarm would be necessary to indicate that maintenance is needed on a particular equipment while patrolling the plant however Ogawa failed to disclose a new event or an alarm to the worker therefore Travagline was incorporated to teach the deficiencies of Ogawa. At col. 5 lines 26-38, Travagline discloses "program instructions that monitor the information stored in the server computer system 70 for alarm events or other conditions requiring immediate attention and thereupon notify appropriate personnel, for example, by sending a message to a notification device 64. Such a device could be a pager, a cellular device, a Personal Digital Assistant (PDA), or any similar device" which teaches the new event or alarm which the maintenance worker in Ogawa can use as an indication that a problem has occurred and through conferencing the worker can contact the monitoring worker (internal or external party) to obtain information regarding the event or alarm that the worker received.

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5. In regards to Applicant's argument on page 12, Applicant argues that Ogawa, Travagline and Tonack does not suggest the recited claim 4-7, 11, 12 and 16-18 and that Tonack does not overcome the deficiencies of Ogawa and Travagline argued above (#4). Examiner respectfully submits that Ogawa in view of Travagline fully discloses the limitations argued above therefore the argument regarding Tonack are moot. Applicant hasn't provided any specific arguments related to claims 4-6, 11, 12 and 16-18 however to clarify the intentions of the rejection, Tonack was used to disclose the limitations recited in claims 4, 16-18 among other limitations, which was related to "retrieving an address" for the external user or expert where the external user or expert have been previously disclosed by Ogawa shown above, and in col. 7 lines 4-26, Tonack discloses "email or pager calls, email server can send out notification to particular locations so that specific technician related to the location are notified" which teaches the address as email.

6. In regards to Applicant's argument on page 13, Applicant argues that Ogawa, Travagline and Vines does not suggest the recited claim 8 and 21 and that Vines does not overcome the deficiencies of Ogawa and Travagline argued above (#4). Examiner respectfully submits that Ogawa in view of Travagline fully discloses the limitations argued above therefore the argument regarding Vines are moot. In regards to Applicant argument at the bottom of page 14-15 in relation of claim 8, Applicant argues that Vines fails to suggest "links to information regarding all equipment, plant or process monitored", however the claims specifically recite "configuring a technical information link of components of said equipment, plant or process with an identity of an internal user with access to relevant technical information". In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "links to information regard all equipment, plant or

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process monitored”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore in col. 6 lines 1-6, Vines discloses “pertinent information about the work orders such as if and when the work has been scheduled, estimated time to completion and crew assigned to the work” teaches links to information regarding the all the equipment being monitored, where the work orders to the equipment and its status are the links to the information regarding the equipments.

7. In regards to Applicant's argument on page 15-16, Applicant argues that Ogawa, Travagline Tonack and Vines does not suggest the recited claims 9 and 10 and that neither Tonack nor Vines overcome the deficiencies of Ogawa and Travagline argued above (#4). Examiner respectfully submits that Ogawa in view of Travagline fully discloses the limitations argued above therefore the argument regarding Tonack and Vines are moot. Applicant also hasn't provided any arguments related to the specific limitations disclosed in claims 9 and 10.

Statement Regarding 35 USC 101

8. As per Claims 15-18 the claims recite “computer readable medium” and in view of the specification, page 16 lines 5-7 further defining the medium as "magnetic disk, CD-ROM, or DVD, Hard disk..." This indicates that the medium is drawn to storage medium and not to any form of energy, waves, or any form of propagation or the like, therefore complies with 35 USC 101.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 3, 13, 15, 19, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogawa et al. (US 20030200058 A1)** as in view of **Travagline et al. (US 6577988 B1)**.

As per Claim 1, Ogawa discloses:

- **A method to carry out at least one of retrieving or accessing information about an equipment, plant or process in a facility comprising a plurality of devices and one or more control systems for process monitoring and control, wherein energy-related information and other data for each said device is stored in a one of said control system systems,** paragraph [0016] “using a portable maintenance terminal device having at least a head-mount display to inspect and service equipment (hereinafter referred to as plant equipment) such as valves and measuring instruments or the like in a plant such as an incineration plant that has a monitoring room”
- **selecting by a maintenance user using a hand-held or wearable portable computing device one of said equipment, plant or process,** at least by paragraph [0020] “maintenance terminal device 6 comprising at least a wearable personal computer (portable computer)”, and paragraph [0033] “a number of monitoring screens are provided for different pieces of plant equipment 1 and can be selected from the maintenance terminal device 6.”
- **configuring a software entity recorded on a computer readable medium with an identity of the selected said equipment, plant or process, the software entity comprising links to information regarding all equipment, plant, process monitored**

and controlled by the control systems, at least by paragraph [0033] “a number of monitoring screens are provided for different pieces of plant equipment 1 and can be selected from the maintenance terminal device 6.”

- **retrieving information associated with said selected equipment, plant or process with the configured software entity, the information comprising maintenance information, technical information, and contact information for at least one of internal users and external users having technical knowledge about the selected equipment, plant or process**, at least by paragraph [0043] “drawings and instruction manuals of plant equipment installed in the plant may be stored in an electronic filing system, thereby allowing workers to reference them while they are patrolling the plant. Thus, the workers can perform efficient and versatile maintenance work.” Which discloses the technical and maintenance information, and paragraph [0024] “A that enables the control panel 5 to be operated from the maintenance terminal device 6 and an online conferencing function B that enables conversation, i.e. conferencing, between the worker using the maintenance terminal device 6 and a monitoring worker in the central monitoring room 3” discloses monitoring worker in the central monitoring room as the internal or external user having technical knowledge about the selected equipment.
- **But Ogawa fails to disclose: (a) presenting or displaying on said portable computing device at least information about a new event or an alarm for said selected equipment, plant or process and at the location of said equipment, plant or process to a maintenance user, utilizing by the maintenance user the information to address the new event or alarm,**

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- **and establishing contact by the maintenance user with at least one internal user or at least one external user about the selected, equipment, plant or process if the maintenance user cannot address the new event or alarm with the retrieved information, and providing of information to the maintenance user by the at least one internal user or at least one external user to address the new event or alarm,** at least by paragraph [0043] “drawings and instruction manuals of plant equipment installed in the plant may be stored in an electronic filing system, thereby allowing workers to reference them while they are patrolling the plant. Thus, the workers can perform efficient and versatile maintenance work.” Which discloses the technical and maintenance information, and paragraph [0024] “A that enables the control panel 5 to be operated from the maintenance terminal device 6 and an online conferencing function B that enables conversation, i.e. conferencing, between the worker using the maintenance terminal device 6 and a monitoring worker in the central monitoring room 3” discloses monitoring worker in the central monitoring room as the internal or external user having technical knowledge about the selected equipment and it should be understood that with conferencing and remote video capabilities that further assistance from the monitoring work can be provided.

However, **Travagline** discloses **(a)** at least by (col. 5 lines 26-38) “program instructions that monitor the information stored in the server computer system 70 for alarm events or other conditions requiring immediate attention and thereupon notify appropriate personnel, for example, by sending a message to a notification device 64. Such a device could be a pager, a cellular device, a Personal Digital Assistant (PDA), or any similar device”

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Therefore would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Travagline** into the teaching of **Ogawa** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of monitoring and performing at least all of the test, diagnostics, and maintenance operations with remote assistance without being restricted to one location which increasing the efficiency of the maintenance.

As per claim 2, canceled.

As per claim 3, claim 1 is incorporated and Ogawa fails to disclose:

- **assigning the new event or alarm for said equipment, plant or process to a maintenance user.**

However, **Travagline** discloses (a) at least by (col. 5 lines 26-38) “program instructions that monitor the information stored in the server computer system 70 for alarm events or other conditions requiring immediate attention and thereupon notify appropriate personnel, for example, by sending a message to a notification device 64. Such a device could be a pager, a cellular device, a Personal Digital Assistant (PDA), or any similar device”

Therefore would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Travagline** into the teaching of **Ogawa** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of monitoring and performing at least all of the test, diagnostics, and maintenance operations with remote assistance without being restricted to one location which increasing the efficiency of the maintenance.

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Claim 13 refers to a computer program product for retrieving and/or accessing information about an equipment, part or process comprising a computer readable medium and computer code means corresponding to method claim 1, and is rejected under the same reason set forth in connection to rejections of claim 1. Where **Ogawa** further discloses a computer program product on computer readable medium at least by (paragraph [0042]) “software program”.

As per claim 14, canceled.

Claims 15 refers to a software architecture recorded on a computer readable medium for retrieving and accessing information about an equipment, part or process comprising a plurality of devices and one or more control system for process monitoring and control corresponding to the method claim 1 respectively, and are rejected under the same reason set forth in connection to rejections of claim 1 respectively above. Where **Ogawa** further discloses a computer program product on computer readable medium at least by (paragraph [0042]) “software program”.

Claims 19 is a control system claim corresponding to the method claim 1, and is rejected under the same reason set forth in connection to rejections of claim 1 respectively above. Where **Ogawa** discloses a system at least by Fig. 2, 3 and 4.

As per claim 22, claim 1 is incorporated and Ogawa further discloses:

- **wherein the information further comprises system data, user data, object data, technical information, specification, supplier information; a user knowledgeable about the selected equipment, plant, or process; a user responsible the selected equipment, plant, or process; users trained about the selected equipment, plant, or process; technical drawings of the selected equipment, plant, or process; contact information regarding users of the selected equipment, plant, or process; or safety**

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information regarding the selected equipment, plant, or process, at least by paragraph [0043] “drawings and instruction manuals of plant equipment installed in the plant may be stored in an electronic filing system, thereby allowing workers to reference them while they are patrolling the plant. Thus, the workers can perform efficient and versatile maintenance work.”

11. **Claims 4-7, 11, 12, 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogawa and Travagline** further in view of **Tonack (US 7120830 B2)**

As per Claim 4, Claim 1 is incorporated and further neither Ogawa nor Travagline discloses:

- **retrieving an address for an external user or expert and presenting the address to the maintenance user.**

However, **Tonack** teaches the above limitations at least by (col. 7 lines 4-26) teaching a maintenance coordination software, where maintenance calls are placed and maintenance technicians are made aware of the maintenance calls in a number of ways; through a terminal listing, email or pager calls, and possible email server can send out notifications to particular locations so that specific technicians related to the locations are notified. Also (col. 10 lines 43-44) “wherein the remote computer is further configured to relay the content of the alert to a maintenance technician”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Ogawa and Travagline** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that

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automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 5, Claim 4 is incorporated and further Qgawa discloses:

- **establishing contact between the external user or expert and the maintenance user,** at least by (paragraph [0027]) “conferencing function B enables wireless conversation (through the microphone 23, speaker 24, microphone 32, and earphone 33) between the control panel 5, which is a parent station, in the central monitoring room 3 and one or more maintenance terminal devices 6”.

As per Claim 6, Claim 4 is incorporated and further Ogawa discloses:

- **establishing a shared display or shared computer application contact between the external user or expert and the maintenance user,** at least by (paragraph [0027]) “The conferencing function B enables wireless conversation (through the microphone 23, speaker 24, microphone 32, and earphone 33) between the control panel 5, which is a parent station, in the central monitoring room 3 and one or more maintenance terminal devices 6, which are child stations, interconnected by wireless, and displays on the display 22 of the control panel 5 in the central monitoring room 3 the video image of a site captured (during patrol) by the CCD camera 34 provided in the HMD”

As per Claim 7, Claim 1 is incorporated and further neither Ogawa nor Travagline discloses:

- **configuring a selected technical characteristic of the selected said equipment, plant or process with an indicator of a high, medium or low priority for returning the selected said equipment, plant or process to a normal state.**

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However, **Tonack** teaches the above limitations at least by (col. 6 lines 1-18) “indicate the operable condition of the machine....Select Problem Code....Operator Notes” where each of these data fields provides the condition of the device providing information which can be used to prioritize the importance of the repair to the failed device. Furthermore (col. 6 lines 49-53) “maintenance and repair technicians can better prioritize their response to service calls if they are experiencing multiple simultaneous failures.”

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Ogawa and Travagline** because one of ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 11, Claim 1 is incorporated and further neither Vines nor Meeker discloses:

- **attaching a user observation to the retrieved information associated with said equipment, plant or process as any from the list of: a text message, a video clip, a photograph, sketch, sound recording.**

However, **Tonack** teaches the above limitations at least by (col. 8 lines 29 - 51) disclosing information entered by the technician such as information related to the repair efforts.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines and Meeker** because one of ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects

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faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 12, Claim 1 is incorporated and further neither Vines nor Meeker discloses:

- **carry out a repair, re-configure, re-programming or replacement of a faulty part of said equipment, plant or process based at least in part on technical information associated with said equipment, plant or process retrieved and/or presented utilizing the software entity.**

However, **Tonack** teaches the above limitations at least by (col. 8 lines 29 - 51) “During the repair effort or upon its completion...” the technician has the ability to enter information related to the repair efforts.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines and Meeker** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

Claim 16-18 refer to a software architecture recorded on a computer readable medium for retrieving and accessing information about an equipment, plant or process comprising a plurality of devices and one or more control system for process monitoring and control corresponding to the method claim 4 and is rejected under the same reason set forth in connection to rejections of claim 4 above. Where **Ogawa** further discloses a computer program product on computer readable medium at least by (paragraph [0042]) “software program”.

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12. **Claims 8 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogawa and Travagline** further in view of **Vines (US 6006171 A)**.

As per claim 8, claim 1 is incorporated and neither Ogawa nor Travagline discloses:

- **configuring a technical information link of component of a said equipment, plant or process with an identity of an internal user with access to relevant technical information,**

However **Vines** teaches the above limitation at least by (col. 6 lines 1-6) “pertinent information about the work order such as if and when the work has been schedules, estimated time to completion and crew assigned to do the work, are displayed on the screen.” Which provides a link to the crew assigned to do the work therefor has access to relevant technical information.

Therefore would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Vines** into the teaching of **Ogawa and Travagline** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of having the ability to contact someone knowledgeable who can assist in the maintenance while on site increasing the efficiency of the maintenance.

As per claim 21, claim 1 is incorporated and neither Ogawa nor Travagline discloses:

- **wherein the maintenance information comprises at least one of service history or service documentation,**

However **Vines** teaches the above limitation at least by (col. 5 lines 51-54) " track the history of work that has been performed on a specific piece of equipment by viewing the equipment history screen shown in FIG. 8”

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Therefore would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Vines** into the teaching of **Ogawa and Travagline** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of having the ability to track repair history which provides insight into maintaining the equipment properly.

13. **Claims 9-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogawa, Travagline and Vines** further in view of **Tonack (US 7120830 B2)**.

As per Claim 9, Claim 8 is incorporated and further neither Ogawa, Travagline nor Vines discloses:

- **configuring said equipment, plant or process with an identity of the internal user with dependent on information recorded in the internal user profile.**

However, **Tonack** teaches the above limitations at least by (col. 7 lines 10 – 14) “request may include an instruction to list only maintenance calls in a particular location or relation to a particular type of production equipment. Thus, maintenance technicians may focus their attention on production equipment only within their area of responsibility.”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Ogawa, Travagline and Vines** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

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As per Claim 10, Claim 8 is incorporated and further neither Ogawa, Travagline nor Vines discloses:

- **configuring said equipment, plant or process with an identity of a user with dependent on information recorded in the internal profile classified by any from the list of: responsibility, training, certified qualification, work experience.**

However, **Tonack** teaches the above limitations at least by (col. 7 lines 10 – 14) “request may include an instruction to list only maintenance calls in a particular location or relation to a particular type of production equipment. Thus, maintenance technicians may focus their attention on production equipment only within their area of responsibility.”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Ogawa, Travagline and Vines** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per claim 23, canceled.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS TRUONG whose telephone number is (571)270-3157. The examiner can normally be reached on MON - FRI: 7:30 - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mahmoudi Tony can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 2169